

## **P6 2013**

### **Examiners' Comments**

#### **General**

The P6 paper for 2013 related to water cleaning products. The technology described was simple but as is the case for all simple technologies there will be subtleties that need to be considered carefully. The pass rate was 43.61%.

The Examiners were pleased to note that many candidates achieved extremely high marks, having demonstrated a thorough understanding of the issues and produced a reasoned, logical (and in some cases not long) answer. The good answers were well-structured and logical leading the reader through the paper in a coherent and step-wise manner. Candidates are reminded that they are giving advice to a client and so they need to be clear and consistent.

Most of the candidates that failed did so because they did one or more of the following:

1. Did not notice that there were two embodiments to consider for Infringement;
2. Did not notice that there were two embodiments in prior art document C to consider for Novelty;
3. Did not actually construe anything in Construction. They just repeated the claims in shorthand or changed the order of words; or
4. Either i) did not complete the paper, or ii) produced a good Construction, Infringement and Novelty analysis, but then no, or very poor, Inventive Step, Amendment and Advice. Perhaps this is through poor time management or lack of appreciation that many marks will be lost for missing out entire sections.

Candidates are reminded that every feature/integer of every claim should be considered at each stage; and, for this paper, each embodiment should have been addressed separately at every stage

in order to have the opportunity to collect maximum marks. The examiners note that the Claims of the principal patent in this paper were not long and contained a limited number of features.

Some candidates appeared not to understand how the devices worked. Given the simple nature of the technology involved this was surprising. It is essential that candidates take the time to understand the underlying technical features of the paper before writing anything.

The use of tables in infringement and novelty is fine as long as the content is present and is sufficient to allow the Examiner to see that the candidate understands why a particular feature is present or not. A number of candidates still rely too much on ticks and crosses with very little support for the conclusion. If a candidate provides no evidence that they have appreciated a point, then marks cannot be awarded.

Candidates are reminded, as always, that, whilst Examiners make every effort to do so, no credit can be given if the Examiner cannot read a candidate's answer.

### **Construction (20 marks)**

A clear, reasoned and consistent Construction analysis underpins the papers of all candidates that ultimately pass.

Some candidates wrote preambles about what they were going to do and the case law around construction. This is not necessary and wastes time. Examiners are not looking for quotes of the law, they are looking for application of the law in the context of the paper.

A proper analysis of the claims must be undertaken. This means the features or integers of the claims must be interpreted in practical, functional terms in the context of the invention, supported by the disclosure and/or common general knowledge (as set out in the paper). Mere repetition of the

wording of the description or the claims, for example stating that an uppermost edge should be an uppermost edge, scored no marks.

At the risk of repeating the above, the purpose of the construction section is to construe the Claims in terms of the description and general knowledge so as to provide a clear determination of what the Claims cover. It is from that proper understanding of the scope of the claims that patentability and infringement is determined. The foundation of the paper lies in defining a construction which the candidate can use for all the other sections. As in real life Court cases there may be different interpretations of a document but the reasoning following on from that construction is consistent.

Many candidates hedged on their interpretation when subsequently dealing with the infringement and novelty sections. This may well be necessary in order to discuss inventive step for a claim which has been found to be anticipated, but the candidate is supposed to have construed the integers already and should not find themselves saying 'it depends on the construction' when dealing with infringement and novelty.

Some candidates differentiated the holding and storage tanks by describing the holding tank as an area where water resided until it passes over the weir whereas the storage tank was for storing cleaned water (i.e. upstream and downstream of the weir respectively). This showed practical thought which didn't rely on differentiation by residence time (which would be difficult to support in practice).

### **Claim 1 (7.5 marks)**

“Apparatus for cleaning water”

Sets the scene - something suitable for cleaning water

“the apparatus comprising a holding tank with a central aperture through which extends an upstanding pipe“

Comprising – including but not limited to.

Holding Tank – a body in which water is retained for a period of time. Consider where the ‘holding tank’ is. Is it the butt or the cleaning means on top?

Central – substantially in the middle of the holding tank (in contrast see pg 6 line 27-30); this term seemed to cause problems for many candidates.

Through which extends – runs through and above and below aperture (e.g. pg 4 line 19-20, page 5 line 25 – helps location of slidable pipe)

“the uppermost edge of which providing a weir”

Uppermost edge – the top of the pipe (“of which” clearly refers to the pipe).

Weir – a low dam to regulate flow of water.

“the holding tank having a filter material provided across its top.”

Filter material – something to remove entrained particles.

Across – situated at or towards the uppermost portion. For example in embodiment 1 the filter is not at the absolute ‘top’; and in embodiment 2 it extends over the top of the wall. Discuss what ‘across’ means e.g. covering the entirety; and provided in the path of on-flowing water.

## **Claim 2 (6.5 marks)**

“Water cleaning and storage apparatus”

Sets the scene - this is a separate independent claim for an apparatus which must be able to both clean and store water. There is an inference that storage is of cleaned water.

“the apparatus comprising a water storage tank having a top wall through which a pipe extends”

Comprising – including but not limited to (note: no additional marks awarded if already discussed for claim 1).

Water storage tank – a container for holding and retaining water for a significant period of time subsequent to passage over the weir.

Top wall – a wall to provide the uppermost delimiting boundary of the tank.

Through which a pipe extends – the pipe runs through and above and below the top wall (“through which” clearly refers to the top wall).

“one end of the pipe providing a weir”

One end – must be the upper end.

Weir – a low dam to regulate flow of water.

“a peripheral wall upstands from the storage tank to provide a holding tank”

Peripheral – the outermost portion, defining a boundary.

Upstands – extends vertically to define the outer wall of a tank for retaining water.

“and wherein a filter material is secured over and between the peripheral wall.”

Filter material – something to remove entrained particles.

Secured over and between the peripheral wall - attached firmly to the wall whilst extending beyond the top of the peripheral wall and across the area defined by the peripheral wall. This is limited to embodiment 2 (see pg 5 line 23).

### **Claim 3 (2.5 marks)**

“Apparatus according to claim 1 or 2”

Apparatus having all the features of claim 1 or claim 2, plus the following.

When dependent on claim 1:

“comprising a wall sloping from or to the pipe”

Comprising – including but not limited to.

Wall – part of the holding tank (see base 11 at pg 4 line 17 and top wall 103 at pg 5 ln19)

Sloping – inclined with respect to a horizontal axis to allow settling of particles (e.g. pg 5 line 13)

When dependent on claim 2:

“comprising a wall sloping from or to the pipe”

Comprising – including but not limited to.

Sloping – inclined with respect to a horizontal axis to allow settling of particles (e.g. pg 5 line 13)

Discussion of ‘top wall’ (claim 2) and ‘a wall’ required to determine the dependency issue.

### **Claim 4 (3.5 marks)**

“Apparatus according to any preceding claim”

The following features, appended to claim 1, or claim 2, or claims 1+3, or claims 2+3.

“wherein the filter material is a mesh”

Mesh – material made of a network of threads/wire to define open passages.

“typically fabricated from steel or other metal material having a mesh hole size of from 1 to 10 mm”

Typically – this feature is non-limiting.

Steel or other metal material – metal/alloy.

Hole size – aperture between network of threads/wires can be construed as limiting to metal meshes or a further feature of plastics due to the use of the word typically which is not limiting to metals.

### **Infringement (27 marks)**

It is important that candidates give a conclusion as to whether a feature is present or not, and that sufficient reasoning is given to explain why the conclusion has been reached. Ticks and crosses, unless accompanied by the rationale, do not give any indication of the reasoning behind the conclusions reached and many of the marks are for such reasoning. Also candidates need to be aware that if they give a short-hand numbering for an integer, this must be used consistently in the infringement section.

There is no right or wrong in this paper and if a candidate makes a point well, with structured reasoning as why they came to a particular conclusion, then they have a good chance of gaining marks.

Most candidates picked up on the two embodiments (Cleanio and CleaniPro). However, where candidates tried to skip a proper analysis of the second embodiment, relying on their analysis of the first embodiment and referring heavily to their answer for the first embodiment, their analysis missed out on critical details that also meant they gained very few of the marks for analysis of the second embodiment even while obtaining most of the marks for the first embodiment. If there are two separate embodiments the Examiners are looking for candidates to be diligent enough to notice the subtle differences.

If the candidates missed that there were two embodiments, they lost many of the marks as they couldn't do proper analysis of novelty, infringement or inventive step.

Most candidates dealt with contributory infringement somewhere in their answers.

Making a note of the relevant parties and their status can be helpful as part of a well-structured answer. Full credit is given regardless of what section the candidate chooses to include this in their answer (e.g. in Infringement or Advice).

### **Cleanio**

#### **Claim 1 (3.5 marks)**

"Apparatus for cleaning water"

Feature present( see pg 9 line 9).

"the apparatus comprising a holding tank with a central aperture through which extends an upstanding pipe"

Holding tank – feature present (see pg 9 line 13 to 15 and pg 10 line 5).

Central aperture – feature present (see pg 9 line 14 – the central pipe extends through the surface).

Upstanding pipe – feature present (see pg 9 line 14).

"the uppermost edge of which providing a weir"

Feature present (see pg 10 line 6)

"the holding tank having a filter material provided across its top."

Feature present. The uppermost flexible surface is a mesh (see pg 9 line 26 and pg 10 line 4)

**Conclusion: Claim 1 is infringed.**

#### **Claim 2 (5 marks)**

"Water cleaning and storage apparatus"

Cleanio is not a 'storage apparatus' but is provided for use with a butt (i.e. is it an "essential means"?). See the client's letter (page 2 line 15) – Wasteaway don't sell butts.

“the apparatus comprising a water storage tank having a top wall through which a pipe extends”

No water storage tank – feature not present.

“one end of the pipe providing a weir”

It has a pipe but not in a top wall of a storage tank – feature not present (is it present when used with a butt?).

“a peripheral wall upstands from the storage tank to provide a holding tank”

It has a holding tank but not upstanding from storage tank – feature not present.

“and wherein a filter material is secured over and between the peripheral wall.”

Filter material is not secured over a peripheral wall – feature not present.

**Conclusion: not infringed.**

#### **Claim 3 when dependent on Claim 1 (2 marks)**

“Apparatus according to claim 1”

Present.

“comprising a wall sloping from or to the pipe”

Feature present – the wall slopes downwardly to the pipe (line 13 page 9).

**Conclusion: Claim 3 is infringed when dependent on claim 1.**

#### **Claim 3 when dependent on Claim 1 (2 marks)**

“Apparatus according to claim 2”

Feature not present – Claim 2 is not infringed.

“comprising a wall sloping from or to the pipe”

Feature present – the wall slopes downwardly to the pipe (line 13 page 9).

**Conclusion: Claim 3 is not infringed, when dependent on Claim 2.**

#### **Claim 4 (2.5 marks)**

“Apparatus according to any preceding claim”

On the basis of the conclusions for claims 1, 2 and 3, Claim 4 is only relevant when dependent on Claim 1 and Claim 3 when dependent on Claim 1.

“wherein the filter material is a mesh”



Feature present – uppermost surface is plastics mesh material.

“typically fabricated from steel or other metal material having a mesh hole size of from 1 to 10 mm

This feature is non-limiting. If the claim was restricted to ‘metal’ then this feature is not present.

If the size feature is construed as being part of plastic mesh there is an arguable case that mesh size is likely to be present (mesh to retain same sorts of objects – leaves, moss etc).

**Conclusions: i) infringed when dependent on 1 (or 1 and 3); ii) not infringed when dependent on 2 (or 2 and 3).**

### **CleaniPro**

#### **Claim 1 (3.5 marks)**

“Apparatus for cleaning water”

Feature present. See eg pg 10 line 20 (CleaniPro incorporates features of Cleanio).

“the apparatus comprising a holding tank with a central aperture through which extends an upstanding pipe”

Holding tank – feature present (see pg 10 line 23).

Central aperture – feature present (see pg 9 line 14 – the central pipe extends through the surface).

Upstanding pipe – feature present (see pg 9 line 14).

“the uppermost edge of which providing a weir”

Feature present. See pg 10 line 6,

“the holding tank having a filter material provided across its top.”

Feature present. The uppermost flexible surface is a steel mesh (see pg 10 line 24).

**Conclusion: claim 1 infringed.**

#### **Claim 2 (3.5 marks)**

“Water cleaning and storage apparatus”

Feature present.

“the apparatus comprising a water storage tank having a top wall through which a pipe extends”

Water storage tank - Feature present – see pg 10 line 19-20 – integral storage tank.

Top wall – Feature present - the lowermost surface 3 is the uppermost surface of the storage tank (see pg 9 line 14 – central pipe extends through the surface).

“one end of the pipe providing a weir”

Feature present. See pg 10 line 6.

“a peripheral wall upstands from the storage tank to provide a holding tank”

Feature present - it has a holding tank which is integral – peripheral wall must upstand.

“and wherein a filter material is secured over and between the peripheral wall.”

Feature not present – it appears that metal mesh is located in same place as in CleaniPro (further information required).

**Conclusion: Claim 2 not infringed.**

#### **Claim 3 when dependent on Claim 1 (1.5 marks)**

Apparatus according to claim 1

Feature present - claim 1 infringed.

“comprising a wall sloping from or to the pipe”

Feature present – the wall slopes downwardly to the pipe (line 13 page 9).

**Conclusion: claim 3 is infringed when dependent on claim 1.**

#### **Claim 3 when dependent on Claim 2 (1.5 marks)**

“Apparatus according to claim 2”

Feature not present – Claim 2 not infringed.

“comprising a wall sloping from or to the pipe”

Feature present – wall slopes downwardly to the pipe (line 13 page 9).

**Conclusion: claim 3 not infringed when dependent on Claim 2.**

#### **Claim 4 (2 marks)**

“Apparatus according to any preceding claim”

On the basis of the conclusions for claims 1, 2 and 3, Claim 4 is only relevant when dependent on Claim 1 and Claim 3 when dependent on Claim 1.

“wherein the filter material is a mesh”

Feature present – the uppermost surface is metal mesh material.

“typically fabricated from steel or other metal material having a mesh hole size of from 1 to 10 mm”

This feature is non-limiting. If the claim was restricted to metal then the feature would be present.

Size feature - not present.

**Conclusions: i) when dependent on claim 1 (or claim 1 and claim 3) claim 4 is infringed/not infringed depending on whether construction incorporated size into mesh feature; ii) when dependent on 2 (or 2 and 3) claim 4 is not infringed.**

### **Novelty (27.5 marks)**

As with infringement, marks are available for discussing all of the points that have been construed. Selecting the points for discussion does not mean only commenting on any single feature of a claim that is missing from the cited art; furthermore, all of the sub-claims should be considered. Not doing so will certainly mean missing out on a lot, if not the majority, of the marks available.

As with infringement, ticks and crosses do not give any indication of the reasoning behind the conclusions and do not, by themselves, attract any marks.

Most candidates realised that Document C included two embodiments, both of which were available as prior art and both of which should have been discussed separately.

Below is a table summarising the points for consideration with regard to novelty.

**CLAIM 1 (11 marks)**

|  | <b>Emb 1</b>   | <b>Emb 2</b>  |
|--|--|---|
| Apparatus for cleaning water   | Feature present. "...there is shown apparatus for cleaning water 1" P13 line 7.  | Feature present "a second apparatus"  |
| the apparatus comprising a holding tank with a central aperture through which extends an upstanding pipe | Tubular tank 10 for holding water (p13 line 8), upper portion UP holds backed up water (pg 14 line 17). LP holds cleaned water – consideration of construction in respect of 'Holding tank'.<br>Line 16 to 17 page 13, baffle extension to tube portion (Figure 1 suggests integral)<br>Feature present. | Tubular tank 10' – upper portion UP' holds backed up water. Pipe 18/19b not centrally located<br>Lower portion LP' holds water. Pipe 18'/19b' may be 'central'<br><br>Feature may be/may not be present depending on whether holding tank LP' or UP' and dependent on 'central' |
| the uppermost edge of which providing a weir   | Feature present: baffle 19b provides a weir to arrest water flow (pg 13 line 14 to 15).  | Feature present – pipe 18'/19b provides a weir  |
| the holding tank having a filter material provided across its top.                                       | Filter only present in tube, if construction led to lowermost tank being construed as holding tank then feature present; if only uppermost portion UP construed as holding tank then not present   | Feature present – if UP' is holding tank then filter CF 'across'<br>If LP' is holding tank, discussion to see if filter 16' is 'across' – feature may/may not be present  |
| <b>Conclusion</b>  | Novel/not novel depending on holding tank construction point   | Feature may/may not be present depending on holding tank construction and 'central' and 'across' features   |

**CLAIM 2 (9 marks)**

|  | <b>Emb 1</b>  | <b>Emb 2</b>  |
|--|---|---|
| Water cleaning and storage apparatus   | Yes   | Yes   |
| the apparatus comprising a water storage tank having a top wall through which a pipe extends | LP, top wall 15, 17, pipe 18,19b<br>Feature present   | LP', top wall 17', pipe 18'/19b'<br>Feature present   |
| one end of the pipe providing a weir   | Baffle 19b<br>Feature present   | Baffle 19b'<br>Feature present.   |
| a peripheral wall upstands from the storage tank to provide a holding tank                   | Tubular tank extends above and below the top wall, water is retained in UP<br>Feature present | Tubular tank extends above and below the top wall, water is retained in UP<br>Feature present |
| and wherein a filter material is secured over and between the peripheral wall.               | Filter 16 not 'secured over'<br>Feature not present   | Neither filter 16' nor CF 'secured over'<br>Feature not present                               |
| <b>Conclusion</b>  | Claim 2 is new  | Claim 2 new   |

**CLAIM 3 (4 marks)**

|   | <b>Emb 1</b>   | <b>Emb 2</b>  |
|---|--|---|
| Dependent on claim 1                          |  |   |
| comprising a wall sloping from or to the pipe | Feature present wall 15 is a funnel portion  | Feature present, wall 15' is a funnel portion   |
|   |  |   |
| Dependent on claim 2                          | Claim 2 is new   |   |
| comprising a wall sloping from or to the pipe | Feature present.   | Feature present   |
| <b>Conclusion</b>                             | Claim 3 possibly old when dependent on claim 1 only, depending on interpretation of "holding tank",<br>Claim 3 new wrt Claim 2 due to dependency | Claim 3 new/or old wrt dependency on Claim 1 depending on Claim 1 construction<br>Claim 3 new when dependent on Claim 2 due to dependency |

**CLAIM 4 (3.5 marks)**

|  | <b>Emb 1</b>                               | <b>Emb 2</b>                               |
|--|--|--|
| Dependent on any preceding claim   |  |  |
| wherein the filter material is a mesh  | Filter isn't a mesh (page 13 line 23)      | Is CF a mesh? No specific teaching         |
| typically fabricated from steel or other metal material having a mesh hole size of from 1 to 10 mm |  | No mention of mesh hole size               |
| <b>Conclusion</b>  | Claim 4 new in respect of all dependencies | Claim 4 new in respect of all dependencies |

### **Inventive Step (12 marks)**

There were marks available for discussion of inventive step of each of the claims. Once again the vast majority of candidates scored poorly on inventive step, with very few obtaining more than 4 marks.

Inventive step arguments need to show (a) knowledge of the test to be applied and (b) demonstration that the test is understood by fitting the facts of the situation to the test. Most candidates referred to the use of the Pozzoli/Windsurfer approach. However, many candidates simply referred to the case and said nothing about how the test in the case law relates to the situation outlined in the paper. A detailed discussion of the case law is not required but it must be applied.

Who is the person skilled in the art (PSA)?

PSA is manufacturer/designer of water cleaning systems (principally for rainwater harvesting).

What is the common general knowledge (CGK) of PSA?

1. All of the background section to Document C.
2. The first four lines of Doc B, lines 10-14 pg 3.

### **Claim 1 (6 marks)**

Depending on interpretation, the feature missing from Claim 1 with respect to embodiment 1 of Document C is a filter. Page 15 line 10 to 13 provides suggestion and motivation and also suggests use of coarse filter is CGK.

With respect to embodiment 2 of Document C the feature which may be missing is 'central'. Discussion of shape – contrast re pg 6 line 20 to 25. The direction and position of inlet pipe 11' is not determinative of need for or absence of 'centrality' (c.f. Embodiment 1).

**Claim 2 (2 marks)**

There is no teaching anywhere of the “over and between” feature. This feature appears to be inventive – it allows robust securing of filter material to allow person to walk over it.

**Claim 3 (1 mark)**

A sloping surface for causing water to flow towards an aperture or drain is unlikely to be found inventive.

**Claim 4 (1 mark)**

It is CGK to use a mesh to stop leaves, moss etc.

**Amendment (5 marks)**

Possible amendments:

1. Amend Claim 1 to cover a movable tube (see line 1 of page 4) to help with the cleaning. Cleanio and CleaniPro would both infringe and there is no teaching of this in the prior art.
2. Amend Claim 1 to cover sweeping arms. However, this excludes CleaniO, which is where most of the financial damage is being done.

Clearly, the optimal commercial amendment was 1.

**Sufficiency (0.5 marks)**

No issues? If there are no issues candidates need to say this to show they have considered sufficiency.



**Advice (8 marks)**

In this section of the paper marks are awarded for summarising conclusions and giving general advice.

Points for discussion:

Patent A is in force and so the client could commence litigation (after sending a letter before action) straight away.

The client must move fast if seeking an interim injunction, especially in light of CleaniPro.

Wasteaway are importing Cleanio – and will import CleaniPro. Wasteaway is an importer, so the client's discussion is not an actionable threat.

A *prima facie* case for infringement exists. Claims 1, 3, 4 are probably infringed, although there are doubts as to the validity of all of the claims. Claim 2 is probably valid but not infringed.

The client is more established in the market especially with respect to commercial articles (despite disappointing sales).

Wasteaway Cleanio product appears to be potentially commercially more successful than the patented product – think about licensing Cleanio.

### **Selected Examiners' Comments**

Good paper. Recognised all the major issues and dealt with them

A thoroughly excellent paper.

Didn't seem to understand everything clearly

Construction is lightweight; paper never recovered from that

Didn't consider claim 4 at all

Excellent paper. Really understood all the main issues

Very bad handwriting

What was written was good, but missed out on too many marks

Didn't pick up on both products or both prior art embodiments

Very good paper. Collected marks all of the way through

Just didn't answer enough of the paper

Great pass - well ordered and no waffle

Not enough detail for each section

C not actually any construction, just re-hash of the wording of the claims

Poor all round; did not use both embodiments for N and Inf

Pass but some odd C – at least it was consistent throughout

This was simple technology, don't understand candidate's difficulty

Just worth a pass due to great N but some poor Inf

Very confused C leading to flip-flopping of Inf and N

Great pass and only 36 pages - textbook stuff!

Good start then tapered off around IS

Good pass (weir construed differently, but OK)

Poor C and N; difficult to read

Did not finish and complained about not being an engineering trainee. Sigh....

Poor but good Am - didn't understand the need to look at 2 embs in Doc B or C

Poor - could not understand candidate's N section at all

Inf - no discussion of 2nd emb; IS bad

C poor leading to poor Inf; did not finish and bizarre IS

You should not expect to pass P6 if you conflate 2 embodiments in novelty attack